## **ABSTRACT OF THE DISCLOSURE**

The present invention relates to the use of a vulcanised thermoplastic elastomer or styrene-ethylene-butadiene-styrene polymer (SEBS) as infill material in artificial turf systems. Artificial turf has achieved growing popularity in recent years, particularly for football fields. The vulcanised thermoplastic elastomer comprises a polyolefin and a rubber wherein the rubber is dynamically vulcanised by the use of a curing agent. The polyolefin is chosen from polyethylene or polypropylene and the rubber is chosen from EPDM or EPM. The rubber is dynamically vulcanised by a curing agent chosen from sulfur, sulfurous compounds, metal oxides, maleimides, phenol resins, silanes or peroxides.